

FIG. 1

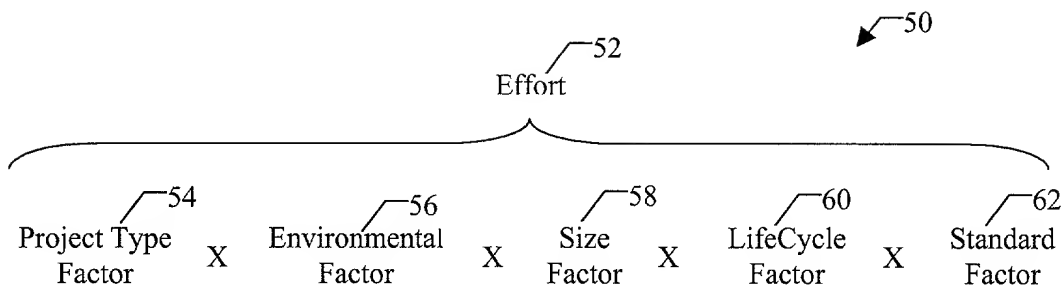


FIG. 2

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	⁷¹	⁷²	⁷³	⁷⁴	⁷⁵	⁷⁶
PROJECT TYPE	M(a)	M(b)	T(a)	T(b)	D(a)	D(b)
77 Military, Average	3.97	1.072	3.80	.378	1.37	1.09
78 Internet E-Commerce	3.08	1.030	3.20	.308	0.85	2.12
79 Embedded, Average	3.60	1.111	4.00	.348	0.81	0.34
80 Commercial	2.40	1.006	2.50	.348	0.57	2.56
81 Systems	3.32	1.149	2.50	.348	1.13	0.53

FIG. 3

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	⁹¹	⁹²
ENVIRONMENTAL CONSIDERATIONS	Env(l)	Env(s)
94 Analyst Capability	0.85	0.0
95 Applications Experience	0.88	0.0
96 Language and Tool Experience	0.91	0.0
97 Management Capability	0.93	0.0
98 Management Experience	0.94	0.0
99 Process Materials	1.00	.0028

FIG. 4

↙ 110

↗ 111

	SOFTWARE LIFECYCLE	Life
113	Client-Server	1.34
114	Internet E-Commerce	1.06
115	Internet-Web	1.06
116	Social Services	1.34
117	Telecomm - Back Office	1.24
118	Military	1.03
119	RAD	0.91

FIG. 5

↙ 130

↗ 131

	SOFTWARE STANDARD	Std
132	Client-Server	0.82
133	Internet E Commerce 1	0.81
134	Internet E Commerce 2	0.73
135	Iterative 3 phases	0.70
136	MIL-STD-498	1.34
137	IEEE/EIA 12207	1.24
138	Commercial	0.80
139	Database	0.63

FIG. 6

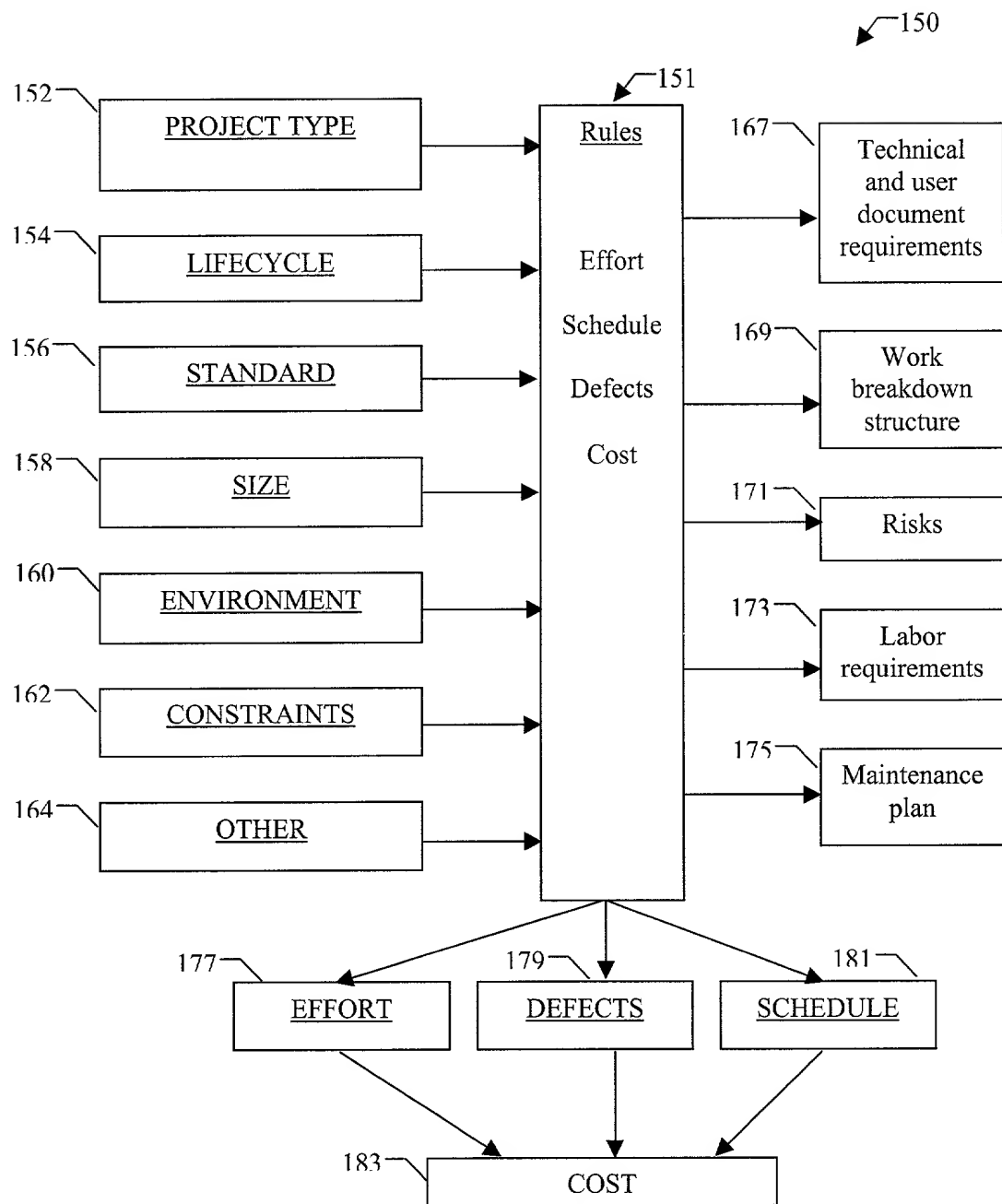


FIG. 7

Cost Xpert 3.0 - 161 x

File Edit Reports Maintain Wizards Tools Help

Project | Volume | Environment | Constraints | Results

Project Name Patent demonstration

Project Manager William H. Roetzheim

Start Date: 3/31/2001 End Date: 3/31/2001 Duration: 0.0 months

Name William H. Roetzheim

Address 13518 Jamul Drive, Jamul, CA 91935

Phone 619.669.3100 Fax 619.669.6914

E-Mail roetzheimw@costXpert.com Copy Company info

1 Company 2 Estimator

Project Type Internet - E-Commerce Lifecycle Internet - E-Commerce 1

Standard Internet - E-Commerce 1 Maximum team size ☐ Outsourced

1 Method 4 Financial 5 Labor Rates 6 Languages

Patent demonstration Cost \$0 Duration 0.0 months

Start [Icons] Sd... Inb... Me... Ac... pet... C... Mc... Vis... Cos... On AC power 3:16 PM

FIG. 8

200

Cost Xpert 3.0 File Edit Reports Maintain Wizards Tools Help

Project | Volume | Environment | Constraints | Results

Project Name Patent demonstration

Project Manager William H. Roetzheim

Start Date: 3/31/2001 End Date: 2/25/2002 Duration: 10.9 months

Name William H. Roetzheim

Address 13518 Jamul Drive, Jamul, CA 91935

Phone 619.669.3100 Fax 619.669.6914

E-Mail roetzheimw@costXpert.com Copy Company info

1 Company 2 Estimator

Project Type Internet - E-Commerce Lifecycle Military

Standard MIL-STD-498 Maximum team size ☐ Outsourced

3 Method 4 Financial 5 Labor Rates 6 Languages

Patent demonstration Cost \$724,023 Duration 10.9 months

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FIG. 9

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Cost Xpert 3.0 File Edit Reports Maintain Wizards Tools Help

Project Volume **Environment** Constraints Results

☒ New ☐ Reused ☐ Cots Equivalent SLOC: 8100 Equivalent 2-Internet Points: 225

Metric	Best	Expected	Worst	Mean	Mean Eq	Std. Dev
Logical Internal Tables	20	20	20	20	100	0
Message-ext. queries	0	0	0	0	0	0
Reports-Ext. copy	10	10	10	10	25	0
Screens - Static	10	10	10	10	10	0
Screens - Dynamic	5	5	5	5	12.5	0
Screens - Interactive	15	15	15	15	60	0

Hint
Enter your best, expected, and worst case estimate of the number of dynamic HTML screens. These would be screens generated on the fly from the database as a DHTML report, or through the use of technologies such as ISAPI, NSAPI, DHTML report engines, ASP, and so on. If the DHTML report requires the input of one or two fields of information as part of the report process, it would still count in this category. If the screen includes significant business logic and user interaction or error checking, count it as an interactive screen instead.

SLOC	1-Function Points	2-Internet Points	3-Domino Points	4-UML Use-Case Pts	5-UML Class Method
6-MK II Function Pts	7-Object Metrics	8-GUI Metrics	9-Feature Points	Bottom Up	Top Down

Patent demonstration Cost \$0 Duration 0 0 months

Start Stop Run Print Help Save Open New Close Copy Paste Undo Redo Find Replace Go To Help

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FIG. 10

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Cost Xpert 3.0

File Edit Reports Maintain Wizards Tools Help

Project Volume Environment Constraints Results

New Reused Cols Equivalent SLOC: 0 Equivalent 3-Domino Points: 0

Metric	Best	Expected	Worst	Mean	Mean Ea	Std Dev
Forms	0	0	0	0	0	0
Navigators	0	0	0	0	0	0
Pages	0	0	0	0	0	0
Views	0	0	0	0	0	0

Hint

Enter your best, expected, and worst case estimate of the number of Forms. Include shared Forms.

SLOC 1-Function Points 2-Internet Points 3-Domino Points 4-UML Use-Case Pts 5-UML Class Method

6-MK II Function Pts 7-Object Metrics 8-GUI Metrics 9-Feature Points Bottom Up Top Down

Patent demonstration Cost: \$724,023 Duration: 10.9 months

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FIG. 11

Overall environment adjustment 1.000

Factor	Planned Value	Adjustment
Graphics and multi-media	Normal	2
Legacy Integration	Normal	1
Site Security	Normal	1
Text content	Normal	1
Tool Selection	Normal	1
Transaction loads	Normal	1

Graphics and multi-media

Web sites vary from those that are for internal use only where functionality is the primary importance, to those where the web site is integral to the corporate image and requires extensive graphics and multi-media development.

VL - No graphics or multi media development is part of this project at all. The web site either does not require this material, or it will be added separately.

L - Graphic images are confined to the home page plus a few small bitmaps.

N - Graphics are present on the home page and in a few bitmaps on other pages. Dynamic graphic images associated with a catalog are included, or there are scattered graphic images on roughly 10% of the pages.

H - Graphics and image are a significant part of the development effort. The organization has an existing corporate image, but the web site needs to reflect that image.

VH - Graphics and image are a significant part of the development effort, and the corporate image either does not exist or will be significantly changed as part of the web development effort

XH - This site needs it all. Graphics, sound, animation, you name it and they want it.

FIG. 13

250

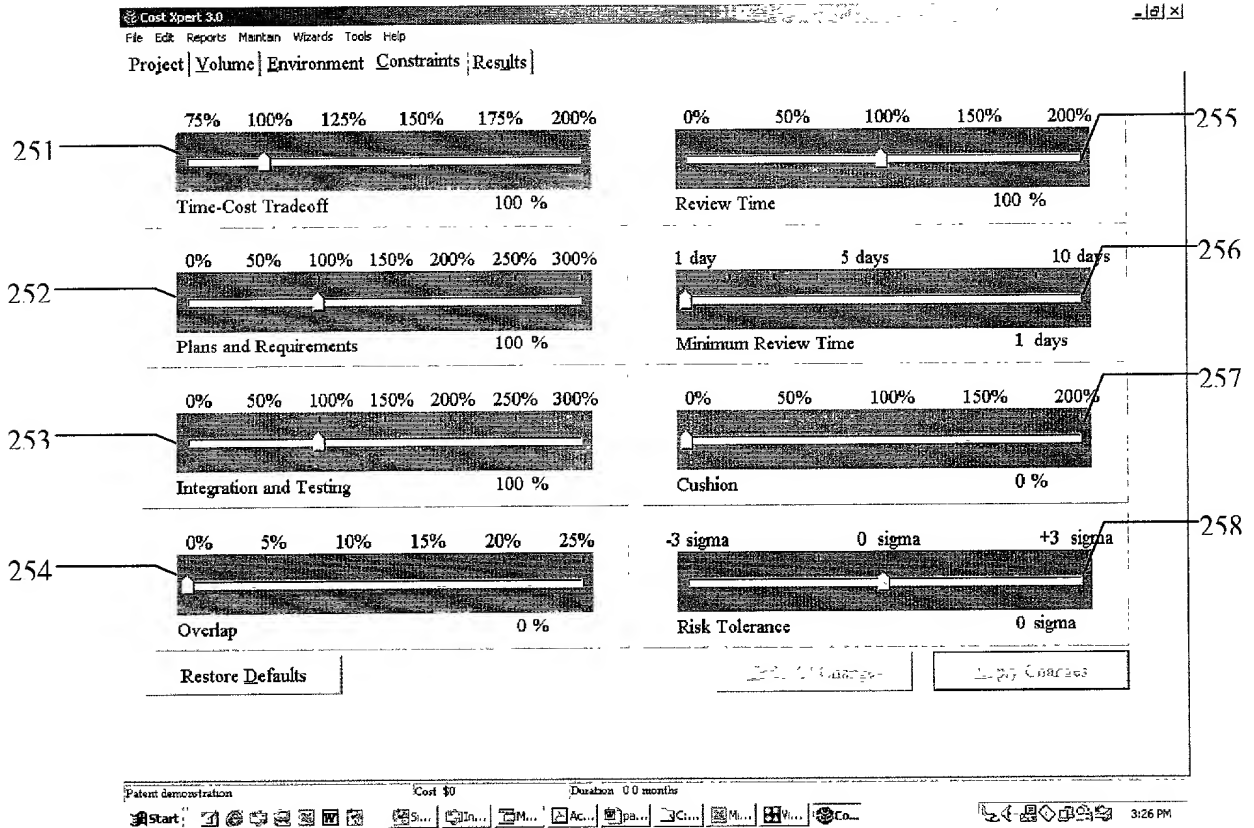


FIG. 14

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Cost Xpert 3.0 File Edit Reports Mantan Wizards Tools Help

Project | **Volume** | Environment | Constraints | Results

Project Standard: Internet - E-Commerce 1

Documents			Description
Name	Selected	Pages	
Software Development Plan (SDP)	<input checked="" type="checkbox"/>	7	The Software User Manual (SUM) tells a hands-on software user how to install and use a computer program. It includes a tutorial section describing how to accomplish specific user work tasks identified as Operational Scenarios in the Software Requirement Specification, and also offers a comprehensive reference to all screens, reports, and menu choices.
Strategic Brief	<input checked="" type="checkbox"/>	21	
Creative Brief	<input checked="" type="checkbox"/>	21	
Software Requirements Specification (SRS)	<input checked="" type="checkbox"/>	29	
Prototype	<input checked="" type="checkbox"/>	1	
Functional Specifications	<input checked="" type="checkbox"/>	88	
Technical Brief	<input checked="" type="checkbox"/>	88	
Site architecture	<input checked="" type="checkbox"/>	47	
Software Test Plan (STP)	<input checked="" type="checkbox"/>	8	
Software Design Description (SDD)	<input checked="" type="checkbox"/>	174	
Software Test Description (STD)	<input checked="" type="checkbox"/>	54	
Software User Manual (SUM)	<input checked="" type="checkbox"/>	60	

Correlation | WBS | Risks | Labor | **Maintenance** | Deliverables

Patent demonstration Cost \$453,743 Duration 88 months

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FIG. 15

Cost Xpert 3.0

File Edit Reports Mantain Wizards Tools Help

Project | Volume | Environment | Constraints | Results

Phases | Gantt | To MS Project

Index	Name	Percent	Cost	Start Date	End Date	Days	Included
1	Project Planning and Mgmt	5.21	26,537.41	3/31/2001	12/24/2001	268 days	<input checked="" type="checkbox"/>
1.1	(DOC) Software Development	5.21	26,537.41	3/31/2001	12/24/2001	268 days	<input checked="" type="checkbox"/>
2	Define Business Strategy	4	26,840.2	3/31/2001	4/13/2001	13 days	<input checked="" type="checkbox"/>
2.1	(DOC) Strategic Brief	0.77	5,171.05	3/31/2001	4/2/2001	2 days	<input checked="" type="checkbox"/>
2.2	(DOC) Functional Specification	3.23	21,669.15	4/2/2001	4/13/2001	11 days	<input checked="" type="checkbox"/>
3	Define Marketing Strategy	3.04	17,960.64	3/31/2001	4/10/2001	10 days	<input checked="" type="checkbox"/>
3.1	(DOC) Creative Brief	3.04	17,960.64	3/31/2001	4/10/2001	10 days	<input checked="" type="checkbox"/>
4	Define Requirements	4	19,566.02	4/13/2001	4/27/2001	14 days	<input checked="" type="checkbox"/>
4.1	(DOC) Software Requirements	3.14	15,335.53	4/13/2001	4/24/2001	11 days	<input checked="" type="checkbox"/>
4.2	(DOC) Software Test Plan	0.86	4,230.49	4/24/2001	4/27/2001	3 days	<input checked="" type="checkbox"/>
5	Design site	20.41	93,922.4	4/27/2001	7/8/2001	72 days	<input checked="" type="checkbox"/>
5.1	(DOC) Technical Brief	5.86	31,546.45	4/27/2001	5/21/2001	24 days	<input checked="" type="checkbox"/>
5.2	(DOC) Software Design Desc	13.56	62,375.94	5/21/2001	7/8/2001	48 days	<input checked="" type="checkbox"/>
6	Build site	28.59	125,507.42	7/8/2001	10/15/2001	99 days	<input checked="" type="checkbox"/>
6.1	(DOC) Prototype	5.72	24,701.48	7/8/2001	10/15/2001	99 days	<input checked="" type="checkbox"/>
6.2	(2-Internet Points) External	1.78	7,684.91	7/8/2001	7/15/2001	7 days	<input checked="" type="checkbox"/>
6.3	(2-Internet Points) Logical	10.16	43,913.75	7/15/2001	8/29/2001	45 days	<input checked="" type="checkbox"/>
6.4	(2-Internet Points) Reports	2.54	10,978.44	8/29/2001	9/9/2001	11 days	<input checked="" type="checkbox"/>
6.5	(2-Internet Points) Screen	1.02	4,361.38	9/9/2001	9/13/2001	4 days	<input checked="" type="checkbox"/>
6.6	(2-Internet Points) Screens	1.27	5,489.22	9/13/2001	9/19/2001	6 days	<input checked="" type="checkbox"/>
6.7	(2-Internet Points) Screens	6.1	26,348.25	9/19/2001	10/15/2001	26 days	<input checked="" type="checkbox"/>
7	Test site	19.96	83,036.37	10/15/2001	12/24/2001	70 days	<input checked="" type="checkbox"/>
7.1	(DOC) Software Test Descr	19.96	83,036.37	10/15/2001	12/24/2001	70 days	<input checked="" type="checkbox"/>
8	Deploy site	14.79	62,372.47	3/31/2001	5/21/2001	51 days	<input checked="" type="checkbox"/>
8.1	(DOC) Site architecture	6.5	27,597.26	3/31/2001	4/22/2001	22 days	<input checked="" type="checkbox"/>
8.2	(DOC) Software User Manual	8.3	34,775.22	4/22/2001	5/21/2001	29 days	<input checked="" type="checkbox"/>

Correlation | WBS | Risks | Labor | Maintenance | Deliverables

Patent demonstration

Cost \$453,743

Duration 8.8 months

Start

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FIG. 16

Cost Xpert 3.0

File Edit Reports Maintain Wizards Tools Help

Project | Volume | Environment | Constraints | Results

Likely Risk Factors

- ☒ Data Conversion
- ☒ Excessive schedule pressure
- ☒ Inability to meet performance goals
- ☒ Interfaces to Other Systems
- ☒ Third party component problems

Additional Risk Factors

Add

Remove

Modify

Risk Tolerance Comparisons

Sigma	Sub Total	Duration
-3	\$453,742.93	8.8
-2	\$453,742.93	8.8
-1	\$453,742.93	8.8
0	\$453,742.93	8.8
+1	\$453,742.93	8.8
+2	\$453,742.93	8.8
+3	\$453,742.93	8.8

Environment Sensitivity Analysis

Factor	Current Value	Cost Impact	Dur Impact
Web strategy	Nominal	\$99,951.70	1.1
Analyst Capability	Nominal	\$88,319.21	1.1
Graphics and multi media	Nominal	\$68,143.88	1.0
Platform Volatility	Nominal	\$68,143.88	1.0
Product Complexity	Nominal	\$68,143.88	1.0
Programmer Capability	Nominal	\$68,143.88	1.0
Internationalization	Nominal	\$68,143.88	1.0
Database Size	Nominal	\$63,600.28	0.9
Site Security	Nominal	\$63,600.28	0.9

Correlation | WBS | Risks | Labor | Maintenance | Deliverables

Patent demonstration Cost: \$453,743 Duration: 8.8 months

Start

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FIG. 17

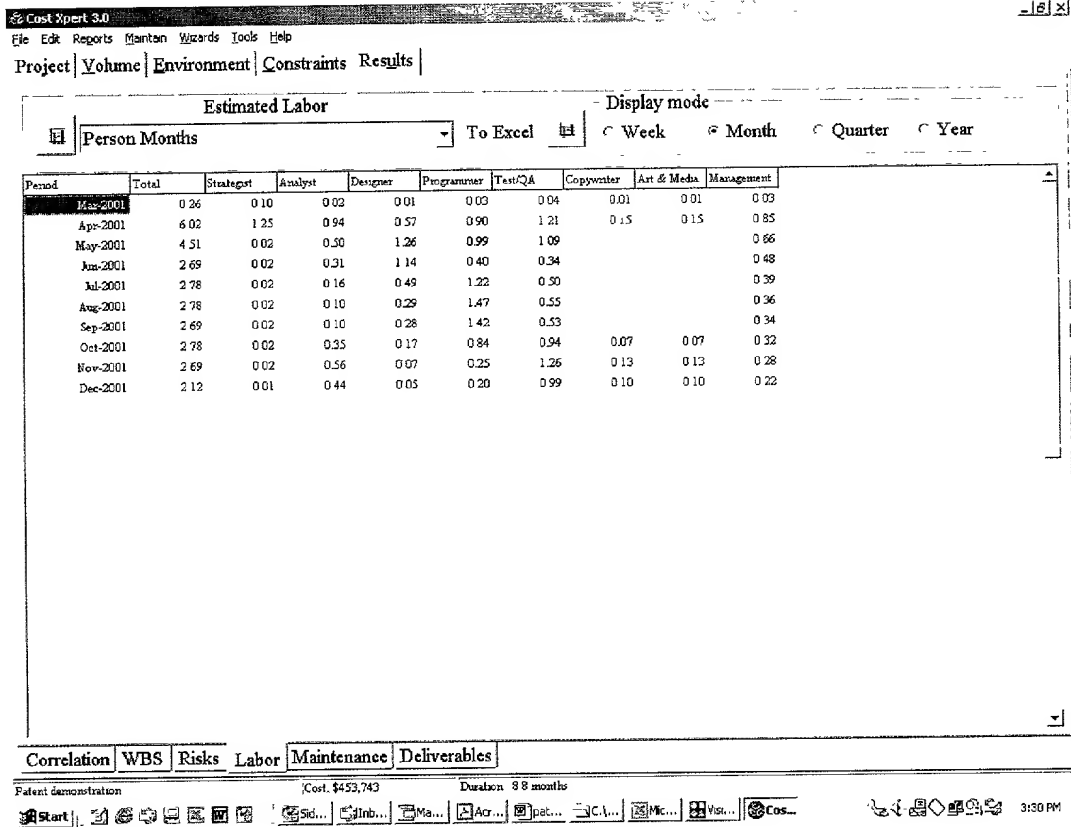


FIG. 18

310

Cost Xpert 3.0									
File Edit Reports Maintain Wizards Tools Help									
Project Volume Environment Constraints Results									
Number of Users: 100			Annual Change Traffic: 15%			Inflation: 0%			
Year	Staffing	Dev. Cost	Defects			Support Calls			
During Development	3.3	\$453,742.93	Requirements	148 Design	173	0			
			Coding	99 Docs	25				
			Bad Fixes	49					
			Total:				494		
1	0.5	\$108,422.97	Requirements	19 Design	22	165			
			Coding	12 Docs	3				
			Bad Fixes	6					
			Total:				62		
2	0.5	\$93,966.57	Requirements	8 Design	9	83			
			Coding	5 Docs	1				
			Bad Fixes	2					
			Total:				25		
3	0.4	\$83,124.27	Requirements	7 Design	7	69			
			Coding	4 Docs	1				
			Bad Fixes	2					
			Total:				21		
4	0.4	\$72,281.98	Requirements	6 Design	7	63			
			Coding	4 Docs	1				
			Bad Fixes	2					
			Total:				20		
Correlation WBS Risks Labor Maintenance Deliverables									
Palantir demonstration Cost \$453,743 Duration 88 months									
Start End Sub... Inb... Me... Acr... pat... C... Mc... Vis... Cos...									
3:31 PM									

FIG. 19

340

342 LIFECYCLE and STANDARD MODULES

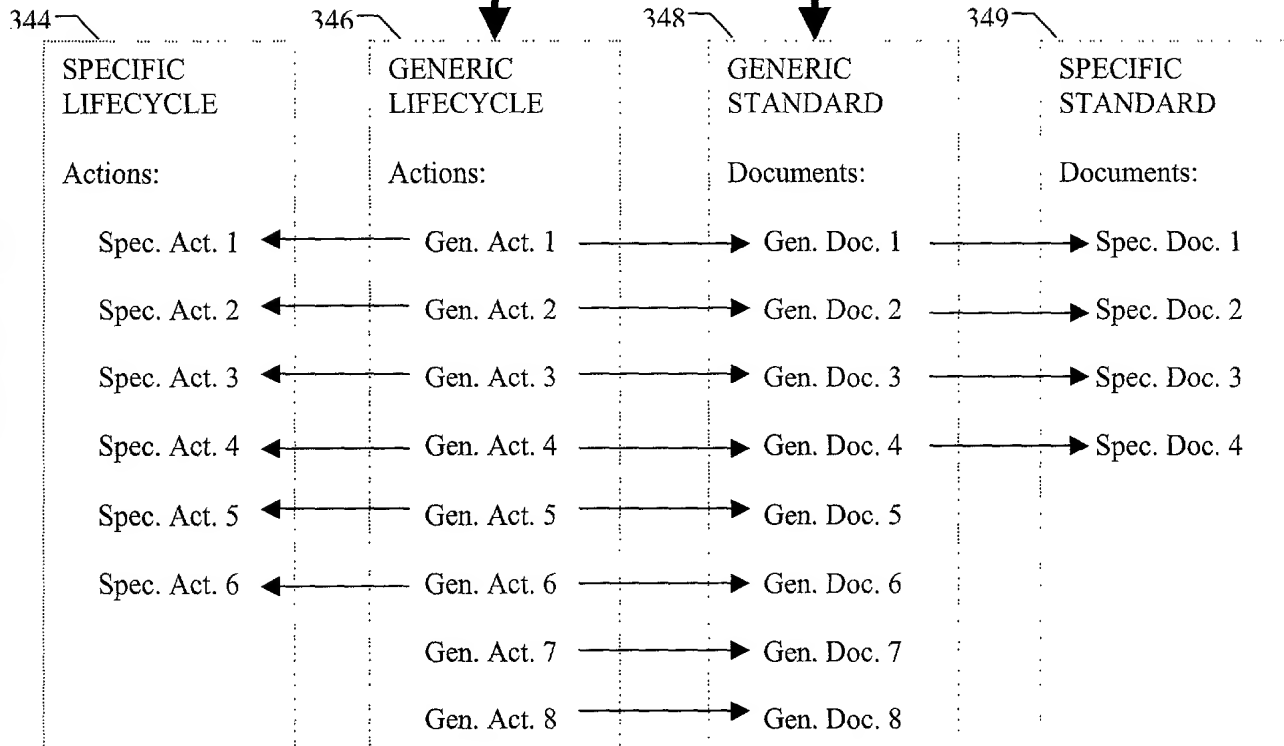


FIG. 20